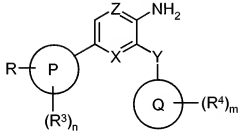
Amendments to the Claims:

This listing of claims will replace all previous version, and listings, of claims in this application.

Listing of Claims:

1. (Currently amended) A compound having the formula **I**



wherein:

Z is N;

Y is $CONR^5$, NR^5CO, SO_2NR^5, NR^5SO_2, CH_2NR^5, NR^5CH_2, NR^5CONR^5, $C_{1\text{-}6}$alkylene, CH_2CO, $COCH_2$, CH=CH, OCH_2 or CH_2O;

X is [[CH]] or N;

P is phenyl ~~or a 5 or 6 membered heteroaromatic ring containing one or more heteroatoms independently selected from N, O or S and said phenyl ring or heteroaromatic ring may optionally be fused with a 5 or 6 membered saturated, partially saturated or unsaturated ring containing one or more atoms selected from C, N, O or S~~;

Q is ~~phenyl or a 5 or~~ a 6 membered heteroaromatic ring containing only one ~~or more~~ nitrogen atom~~s and said phenyl ring or heteroaromatic ring ring may optionally be fused with a 5 or 6 membered saturated, partially saturated or unsaturated ring containing one or more atoms selected from C, N, O or S~~;

R is $C_{1\text{-}6}$alkyl$NR^{10}R^{11}$ or $C_{1\text{-}6}$alkylazetidine which azetidine ring may be optionally substituted by A;

R^3 and R^4 are independently selected from halo, nitro, CHO, $C_{0\text{-}6}$alkylCN, $OC_{1\text{-}6}$alkylCN, $C_{0\text{-}6}$alkylOR^6, $OC_{1\text{-}6}$alkylOR^6, fluoromethyl, difluoromethyl, trifluoromethyl, fluoromethoxy, difluoromethoxy, trifluoromethoxy, $C_{0\text{-}6}$alkylNR^6R^7, $OC_{1\text{-}6}$alkylNR^6R^7,

$OC_{1-6}alkylOC_{1-6}alkylNR^6R^7$, NR^6OR^7 $C_{0-6}alkylCO_2R^6$, $OC_{1-6}alkylCO_2R^6$, $C_{0-6}alkylCONR^6R^7$, $OC_{1-6}alkylCONR^6R^7$, $OC_{1-6}alkylNR^6(CO)R^7$, $C_{0-6}alkylNR^6(CO)R^7$, $O(CO)NR^6R^7$, $NR^6(CO)OR^7$, $NR^6(CO)NR^6R^7$, $O(CO)OR^6$, $O(CO)R^6$, $C_{0-6}alkylCOR^6$, $OC_{1-6}alkylCOR^6$, $NR^6(CO)(CO)R^6$, $NR^6(CO)(CO)NR^6R^7$, SR^6, $C_{0-6}alkyl(SO_2)NR^6R^7$, $OC_{1-6}alkylNR^6(SO_2)R^7$, $OC_{0-6}alkyl(SO_2)NR^6R^7$, $C_{0-6}alkyl(SO)NR^6R^7$, $OC_{1-6}alkyl(SO)NR^6R^7$, SO_3R^6, $C_{0-6}alkylNR^6(SO_2)NR^6R^7$, $C_{0-6}alkylNR^6(SO)R^7$, $OC_{1-6}alkylNR^6(SO)R^7$, $OC_{0-6}alkylSO_2R^6$, $C_{0-6}alkylSO_2R^6$, $C_{0-6}alkylSOR^6$, $C_{1-6}alkyl$, $C_{2-6}alkenyl$, $C_{2-6}alkynyl$, $C_{0-6}alkylC_{3-6}cycloalkyl$, $C_{0-6}alkylaryl$ and $C_{0-6}alkylheteroaryl$, wherein any $C_{1-6}alkyl$, $C_{2-6}alkenyl$, $C_{2-6}alkynyl$, $C_{0-6}alkylC_{3-6}cycloalkyl$, $C_{0-6}alkylaryl$ and $C_{0-6}alkylheteroaryl$ may be optionally substituted by one or more A;

m is 0, 1, 2, 3 or 4;

n is 0, 1, 2, 3 or 4;

R^5 is hydrogen, $C_{1-6}alkyl$, $C_{2-6}alkenyl$, $C_{2-6}alkynyl$, $C_{0-6}alkylC_{3-6}cycloalkyl$, $C_{0-6}alkylaryl$, $C_{0-6}alkylheteroaryl$, $C_{1-6}alkylNR^6R^7$ or $C_{1-6}alkylCONR^6R^7$;

R^6 and R^7 are independently selected from hydrogen, $C_{1-6}alkyl$, $(CO)OR^8$, $C_{2-6}alkenyl$, $C_{2-6}alkynyl$, $C_{0-6}alkylC_{3-6}cycloalkyl$, $C_{0-6}alkylaryl$, $C_{0-6}alkylheteroaryl$ and $C_{1-6}alkylNR^8R^9$;

R^6 and R^7 may together form a substituted 5 or 6 membered heterocyclic ring containing one or more heteroatoms independently selected from N, O or S, which heterocyclic ring may be optionally substituted by A;

R^8 and R^9 are independently selected from hydrogen, $C_{1-6}alkyl$, $C_{2-6}alkenyl$, $C_{2-6}alkynyl$, $C_{0-6}alkylC_{3-6}cycloalkyl$, $C_{0-6}alkylaryl$ and $C_{0-6}alkylheteroaryl$;

R^8 and R^9 may together form a 5 or 6 membered heterocyclic ring containing one or more heteroatoms independently selected from N, O or S, which heterocyclic ring may be optionally substituted by A;

R^{10} is hydrogen, $C_{1-6}alkyl$, $C_{2-6}alkenyl$, $C_{2-6}alkynyl$, $C_{0-6}alkylC_{3-6}cycloalkyl$, $C_{0-6}alkylaryl$, $C_{0-6}alkylheteroaryl$ or $C_{1-6}alkylNR^8R^9$;

R^{11} is $C_{0-6}alkylC_{3-6}cycloalkyl$;

A is halo, nitro, CHO, CN, OR^6, $C_{1-6}alkyl$, $C_{2-6}alkenyl$, $C_{2-6}alkynyl$, $C_{0-6}alkylC_{3-6}cycloalkyl$, fluoromethyl, difluoromethyl, trifluoromethyl, fluoromethoxy, difluoromethoxy, trifluoromethoxy, $C_{0-6}alkylNR^6R^7$, $OC_{1-6}alkylNR^6R^7$, CO_2R^8, $CONR^6R^7$, $NR^6(CO)R^6$, $O(CO)R^6$, COR^6, SR^6, $(SO_2)NR^6R^7$, $(SO)NR^6R^7$, SO_3R^6, SO_2R^6 or SOR^6;

as a free base or a pharmaceutically acceptable salt, solvate or solvate of salt thereof.

2. (Original) A compound according to claim 1, wherein Z is N; Y is $CONR^5$; X is N; P is phenyl; Q is a 6 membered aromatic heterocyclic ring containing one nitrogen atom; R is $C_{1-6}alkylNR^{10}R^{11}$; m is 0; n is 0; R^5 is hydrogen; R^{10} is hydrogen or $C_{0-6}alkylC_{3-6}cycloalkyl$; $C_{0-6}alkylaryl$, $C_{0-6}alkylheteroaryl$ or $C_{1-6}alkylNR^8R^9$; and R^{11} is $C_{0-6}alkylC_{3-6}cycloalkyl$.

3. (Currently amended) A compound according to claim 2, wherein $C_{1-6}alkyl$ in $C_{1-6}alkylNR^{10}R^{11}$ represents propyl; R^{10} and R^{11} represents cyclobutyl; and Q represents pyridine.

4. (Original) A compound which is:
3-Amino-6-{4-[3-(dicyclobutylamino)propyl]phenyl}-*N*-pyridin-3-ylpyrazine-2-carboxamide hydrochloride;
as a free base or an alternative pharmaceutically acceptable salt, solvate or solvate of salt thereof

5. (Original) A compound which is:
3-Amino-6-bromo-*N*-pyridin-3-ylpyrazine-2-carboxamide;
as a free base, a salt, solvate or solvate of a salt thereof.

6. (Original) A compound which is:
N-[3-(4-Bromophenyl)propyl]-*N*,*N*-dicyclobutylamine;
as a free base, a salt, solvate or solvate of a salt thereof.

7. (Original) A pharmaceutical formulation comprising as active ingredient a therapeutically effective amount of a compound according to any one of claims 1 to 4 in association with pharmaceutically acceptable carriers or diluents.

Claims 8 to 14. (Cancelled).

15. (Currently amended) A method of prevention and/or treatment of conditions associated with glycogen synthase kinase-3, comprising ~~administrering~~ administering to a mammal, including man in need of such prevention and/or treatment, a therapeutically effective amount of a compound of formula **I** as defined in any one of claims 1 to 4.

16. (Currently amended) A method of prevention and/or treatment of dementia, Alzheimer's Disease, Parkinson's Disease, Frontotemporal dementia Parkinson's Type, Parkinson dementia complex of Guam, HIV dementia, diseases with associated neurofibrillar tangle pathologies and dementia pugilistica, comprising ~~administrering~~ administering to a mammal, including man in need of such prevention and/or treatment, a therapeutically effective amount of a compound of formula **I** as defined in any one of claims 1 to 4.

17. (Original) The method according to claim 16, wherein the disease is Alzheimer's Disease.

18. (Currently amended) A method of prevention and/or treatment of amyotrophic lateral sclerosis, corticobasal degeneration, Down syndrome, Huntington's Disease, ~~postencephelatic~~ postencephalitic parkinsonism, progressive supranuclear palsy, Pick's Disease, Niemann-Pick's Disease, stroke, head trauma and other chronic neurodegenerative diseases, Bipolar Disease, affective disorders, depression, schizophrenia, cognitive disorders, hair loss and contraceptive medication, comprising ~~administrering~~ administering to a mammal, including man in need of

such prevention and/or treatment, a therapeutically effective amount of a compound of formula **I** as defined in any one of claims 1 to 4.

19. (Currently amended) A method of prevention and/or treatment of predemented states, Mild Cognitive Impairment, Age-Associated Memory Impairment, Age-Related Cognitive Decline, Cognitive Impairement No Dementia, mild cognitive decline, mild neurocognitive decline, Late-Life Forgetfulness, memory impairment and cognitive impairment, vascular dementia, dementia with Lewy bodies, Frontotemporal dementia and androgenetic alopecia and Type I and Type II diabetes, diabetic neuropathy and diabetes related disorders, comprising ~~administrering~~ administering to a mammal, including man in need of such prevention and/or treatment, a therapeutically effective amount of a compound of formula **I** as defined in any one of claims 1 to 4.

20. (Cancelled).